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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,278	07/18/2003	Ga-pyo Nam	5649-1102	4592
20792	7590	10/06/2005	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			LAM, DAVID	
PO BOX 37428			ART UNIT	
RALEIGH, NC 27627			PAPER NUMBER	
			2827	

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/622,278	Applicant(s) NAM ET AL.	
	Examiner David Lam	Art Unit 2827	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-28 is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 29 is/are rejected.
- 7) ☒ Claim(s) 3-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Respond to Amendment

1. This office is in response to amendment file on 7/29/05.
 - Claims 1-29 are pending in the application.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-2, 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Tedrow et al. (6,772,273).

Regarding to claims 1-2, Tedrow et al. discloses a flash memory comprising: a local row decoder (220, 290) configured to drive word lines (by 221) coupled to a bank (210) of a flash memory responsive to separate read and write control signals (291, 192, 294) provide thereto from outside the local row decoder circuit, wherein the flash memory support read-while-write capability, wherein the read operation in a first bank of the flash memory can be carried out simultaneous with a write operation in a second bank of the flash memory. *See Figs. 2-4; Cols. 2-4.*

With regard to claim 29, Tedrow et al. disclose a flash memory comprising: first and second banks of flash memory (210), wherein the flash memory support read-while-write

Art Unit: 2827

capability, wherein a read operation in the first bank of the flash memory can be carried out simultaneous with a write operation in the second bank of the flash memory. *See Figs. 2-4; Cols. 2-4.*

Response to Arguments

Applicant's arguments filed on 7/29/05 have been fully considered but they are not persuasive.

With respect to Applicant's arguments on pages 2-4 of the remarks, "Tedrow (6,772,273)'s reference does not disclose " a local row decoder configured to drive word lines coupled to a bank of a flash memory responsive to separate read and write control signal **provide thereto from outside the local row decoder circuit.**" The Examiner disagrees with this statement; Tedrow et al. discloses a flash memory comprising: a local row decoder (220, 290) configured to drive word lines (by 221) coupled to a bank (210) of a flash memory responsive to separate read and write control signals (291, 192, 294) **provide thereto from outside the local row decoder circuit** (from an central processing unit (CPU)), wherein the flash memory support read-while-write capability, wherein the read operation in a first bank of the flash memory can be carried out simultaneous with a write operation in a second bank of the flash memory. *See Figs. 2-4; Cols. 2-4.*

Allowable Subject Matter

3. Claims 3-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2827

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record fails to teach the flash memory as noted above and further comprising a global row decoder circuit, among others as claimed in claim 3, coupled to the local row decoder circuit via the separated read and write control signals.

4. The following is an examiner's statement of reasons for allowance: Claims 16-28 are allowable over the prior art of record because none of the prior art whether taken singularly or in combination, especially when these limitations are considered within the specific combination claimed, to teach: a flash memory device comprising: local row decoders circuit, among others as claimed in independent claim 16, in respond to a separate write and read control signals from global row decoder circuits, to enable read operation in a first sector in one of a plurality of banks and enables a write operation in a second in another of the plurality of the of banks simultaneous with the read operation.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2827

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lam whose telephone number is 571-272-1782. The examiner can normally be reached on 6:00 – 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoai Ho can be reached on 571-272-1777. The fax phone numbers for the organization where this application or proceeding is assigned is (571) 272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Lam

October 2, 2005



DAVID LAM
PRIMARY EXAMINER